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system comprising:

air-coupled transducer means, spaced from the medium to be inspected, which transmit optical energy for introducing to and sensing from the medium an acoustic signal that propagates in said medium at a predetermined frequency; and

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means, responsive to the sensed propagating acoustic signal, for detecting in the sensed acoustic signal the Doppler shifted frequency representative of a flaw in the medium.

DZ
24. (Twice Amended) A flaw detection system using acoustic Doppler effect for detecting flaws in a medium wherein there is relative motion between the medium and system comprising:

air-coupled transducer means, spaced from the medium to be inspected, for introducing to and sensing from the medium an acoustic signal that propagates in said medium at a predetermined frequency said transducer means including a laser vibrometer interferometer for sensing the acoustic signal propagating in the medium.

25. (Once Amended) A flaw detection system using acoustic Doppler effect for detecting flaws in a medium wherein there is relative motion between the medium and system comprising:

air-coupled transducer means, spaced from the medium to be inspected, for inducing an acoustic signal to propagate in the medium at a predetermined frequency and sensing the propagating acoustic signal in the medium; and said transducer means including a transmitter and a receiver and said transmitter including a laser for locally

heating the medium to generate acoustic signals; and

means, responsive to the sensed propagating acoustic signal, for distinguishing the Doppler shifted frequency representative of a flaw in the medium.

D2
cont

26. (Once Amended) A flaw detection system using acoustic Doppler effect for detecting flaws in a medium wherein there is relative motion between the medium and system comprising:

an air-coupled transducer, spaced from the medium to be inspected, that transmits optical energy for introducing to and sensing from the medium an acoustic signal that propagates in said medium at a predetermined frequency; and

a detector, responsive to the sensed propagating acoustic signal, that detects in the sensed acoustic signal the Doppler shifted frequency representative of a flaw in the medium.

D3

28. (Once Amended) A flaw detection system using acoustic Doppler effect for detecting flaws in a medium wherein there is relative motion between the medium and system, comprising:

an air-coupled transducer, spaced from the medium to be inspected, that introduces to and senses from the medium an acoustic signal that propagates in said medium at a predetermined frequency, said transducer including a laser vibrometer interferometer that senses the acoustic signal propagating in the medium.

29. (Once Amended) A flaw detection system using acoustic Doppler effect for

detecting flaws in a medium wherein there is relative motion between the medium and system, comprising:

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an air-coupled transducer, spaced from the medium to be inspected, that induces an acoustic signal to propagate in the medium at a predetermined frequency and senses the propagating acoustic signal in the medium, said transducer including a transmitter and a receiver, said transmitter including a laser that locally heats the medium to generate acoustic signals; and

means, responsive to the sensed propagating acoustic signal, for distinguishing the Doppler shifted frequency representative of a flaw in the medium.

A marked up copy of the claims as amended is attached at the end of this amendment for the Examiner's convenience.

REMARKS

The Applicant appreciates the Examiner's thorough examination of the Application and requests reexamination and reconsideration of the Application in view of the preceding amendments and the following remarks.

Applicant has amended claims 22, 24-26, 28 and 29 to better define the invention. These amendments do not add any new matter. Support for these amendments can be found in the subject Application at page 10, lines 9-16.

The Examiner rejects claims 22-29 under 35 U.S.C §102(b) as allegedly being anticipated by U.S. Patent No. 4,659,224 to Monchalin (hereinafter "Monchalin").

Applicant respectfully traverses the Examiner's rejection in view of the above